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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,081	11/29/2004	Marc Maria Leo Jan LaFaille	13877/15501	9659
26646 . 7590 01/17/2008 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004				
			EXAMINER MAZUMDAR, SONYA	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 01/17/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,081	LAFAILLE, MARC MARIA LEO JAN	
	Examiner	Art Unit	
	Sonya Mazumdar	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/2/2005</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 1 already discloses subjecting layer(s) to "an at least partial curing treatment" and claim 2 teaches subjecting one or more of the layers to a curing treatment.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 4, 7, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2 and 10, "possibly" is a term which renders the claim indefinite. For example, in performing curing "possibly after the application of the last layer of printing medium", the step need not occur.

With respect to claim 4, the limitations "the first layer" and "the second layer" in lines 3 and 4 are recited. There is insufficient antecedent basis for this limitation in the claim.

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With respect to claim 7, it is unclear as to what a "top layer" is in reference to, whether the layer is the top layer on top of the carrier before transfer onto an object or the layer is the top layer of the pattern on the object after being transferred.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 13 is rejected under 35 U.S.C. 102(b) as being unpatentable by Kobayashi et al. (US 6,110,316)

Kobayashi et al. teach a device for printing objects that comprises multiple processing stations for printing a release layer, a paint layer, and an adhesive layer on a carrier (S), and transferring the layers onto an object to be printed, by bringing the carrier and object into mutual contact (abstract; column 3, line 55 – column 4, line 13; column 9, lines 1-5, lines 13-17, and lines 25-26 Figure 1).

"Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." *In re Young*, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)) (MPEP § 2115).

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 7, 8, 9, 10, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaFaille in view of Shadbolt et al. (GB 2079219)

With respect to claim 1, LaFaille teaches a method for printing objects, where an object (5) is provided with a print by transfer from an ink layer (29) on a flexible carrier (2). The layer is transferred onto the object to be printed by bringing the carrier together with the ink layer and the object into mutual contact by a pressing means (6), and by removing the object from the carrier after the transfer of the ink layer is completed (page 1, line 33 – page 2, line 36; page 4, line 13 – line 23; Figure 3).

Although LaFaille teaches printing several colors onto an object (page 5, lines 32-35), LaFaille does not teach providing multiple layers on a carrier to transfer onto an object, where one of the layers has been subjected to at least a partial curing treatment. Shadbolt et al. teaches transferring multiple layers, comprising a coating and an

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adhesive layer, from a flexible backing sheet onto a receptor; where the coating was hot air dried before being transferred (Shadbolt: page 2, lines 28-51; abstract).

Drying is interpreted to be a type of partial curing treatment (Applicant's specification: page 3, lines 28-29). It would have been obvious to provide multiple layers to transfer onto an object, where one of the layers has been subjected to hot air drying, as taught in Shadbolt et al., to achieve a desired coating thickness so it can be easily transferred, with the top layer providing adherence to the receptor being transferred onto (Shadbolt: page 2, lines 13-18).

With respect to claim 7, LaFaille in view of Shadbolt et al. teaches an ink layer (29) on top of a carrier (2) to be transferred onto an object (LaFaille: page 1, line 35 – page 2, line 6).

With respect to claim 8, LaFaille in view of Shadbolt et al., Pointon, and Tanaka teaches an adhesive layer, i.e. absorbing printing medium, over an ink layer to provide for a good adherence to an object to which it is transferred from a carrier (Shadbolt: page 5, lines 32-35).

With respect to claim 9, LaFaille in view of Shadbolt et al. teaches using a frame, i.e. flat carrier, to support the carrier (LaFaille: page 7, lines 13-24).

With respect to claim 10, LaFaille in view of Shadbolt et al. teaches printing with a device by first applying ink layers on a carrier and then transferring the layers onto an object to be printed (LaFaille: page 5, line 26 – page 6, line 10 ; Figure 1).

With respect to claim 11, LaFaille in view of Shadbolt et al. teaches that during the transfer of ink layers, a carrier (2) is brought into contact with means (8) forming a

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support for the carrier around the object to be printed and provide for clamping of the carrier by bolts (7) (LaFaille: page 5, lines 14-19; Figure 3).

With respect to claim 12, LaFaille in view of Shadbolt et al. teaches that during the transfer of ink layers onto an object, a carrier (2) is brought into contact with a chamber-shaped part (20) which is open at one side, such that the open side is sealed by the carrier and a chamber is formed in which a pressure can be created with the purpose of assisting in pressing the carrier around the object (LaFaille: page 6, line 33 – page 7, line 2; Figure 1).

8. Claims 2, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaFaille in view of Shadbolt et al. as applied to claim 1 above, and further in view of Pointon (US 4,391,853) and Tanaka et al. (JP 2137993).

The teachings of claim 1 are as described above.

With respect to claim 2, LaFaille fails to teach subjecting an ink layer to a curing treatment after being transferred to an object. Pointon teaches that ultraviolet radiation to cure a film is an alternative method to heat curing (Pointon: column 13, lines 38-42). Tanaka et al. teach curing a release layer (13) beneath an ink layer (14) and an adhesive layer (15) with an ultraviolet light (Tanaka: abstract). It would have been obvious to one having ordinary skill in the art to do incorporate the teachings of Pointon and Tanaka et al. so that the cured layer on the surface of the image pattern layer (16) enables an image application of high weatherability and resistance to marring (Tanaka: abstract).

With respect to claims 3 and 4, LaFaille in view of Shadbolt et al., Pointon, and Tanaka et al. teach transferring multiple layers, comprising a coating and an adhesive

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layer, from a flexible backing sheet onto a receptor; where each coating layer is at least partially cured before another layer is applied and before being transferred onto an object (Shadbolt: page 2, lines 28-51; abstract; Pointon: column 13, lines 38-46).

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaFaille in view of Shadbolt et al., as applied to claim 1 above, and further in view of Enlow et al. (US 6,254,712)

The teachings of claim 1 are as described above.

LaFaille in view of Shadbolt et al. fails to teach cleaning a carrier prior to the application of ink layers by a self-adhesive layer, and then subsequently removing the self-adhesive layer. However, Enlow et al. teach cleaning a carrier prior to coating by passing it through an anti-static vacuum station and a tacky roll web cleaner, comprising a pair of adhesive lint rolls (column 6, lines 4-8; column 35, lines 46-57; Figure 14). It would have been obvious to one having ordinary skill in the art to clean a carrier prior to coating, as Enlow et al. teach, and would have been motivated to do so to remove airborne contaminants as well as macroscopic debris particles off the carrier.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being anticipated by LaFaille (WO 00/61376).

LaFaille teaches a method for printing objects, where an object (5) is provided with a print by transfer from an ink layer (29) on a flexible carrier (2). LaFaille teaches that during the transfer of ink layers, a carrier (2) is brought into contact with means (8) forming a support for the carrier around the object to be printed and provide for clamping of the carrier by bolts (7) (LaFaille: page 5, lines 14-19; Figure 3). The layer is

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transferred onto the object to be printed by bringing the carrier together with the ink layer and the object into mutual contact by a pressing means (6), and by removing the object from the carrier after the transfer of the ink layer is completed (page 1, line 33 – page 2, line 36; page 4, line 13 – line 23; Figure 3).

Although LaFaille does not specifically teach clamps (Applicant's specification: numeral 30 in Figures 10 and 11), it would have been obvious to substitute bolts for clamps, as shown by LaFaille, since the bolts are used to "clamp" a carrier at its circumference in a frame (page 5, lines 14-19).

Claim 15 is being treated under 35 USC 112, 6th paragraph.

11. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. as applied to claim 13 above, and further in view of LaFaille.

Kobayashi et al. fail to teach a printing device comprising a chamber-shaped part. However, it would have been obvious to do, as LaFaille teaches that during the transfer of ink layers onto an object, a carrier (2) is brought into contact with a chamber-shaped part (20) which is open at one side, such that the open side is sealed by the carrier and a chamber is formed in which a pressure can be created with the purpose of assisting in pressing the carrier around the object (page 6, line 33 – page 7, line 2; Figure 1).

Allowable Subject Matter

12. Claims 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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There are no teachings found in the prior art of a printing device that comprises a moving, rotating table in which several carriers are provided, such that by systematically rotating the table, the carriers end up into processing stations and the actual printing device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Souya Wazumoto

SM

Philip C. Tucker

PHILIP C. TUCKER, PH.D.
SUPERVISORY PATENT EXAMINER
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